

Q I B2 cont

transfersomes, wherein the total concentration of said lipid in said medium is from about 0.1% to about 30%, by weight and the ratio of lipid to surfactant is from about 5.5:1 to about 1:500.

32. (New) Preparation as claimed in claim 31, wherein said transfersomes are unilamellar.
33. (New) Preparation as claimed in claim 31, wherein said permeability barrier is mammalian skin.
- 125 B3* 34. (New) Preparation as claimed in claim 31, wherein the concentration of said surfactant is between 20 and 50 mol-% of the concentration of said surfactant causes said lipid to be solubilized, and the edge tension of said transfersomes is about 10 Piconewton or less.
35. (New) Preparation as claimed in claim 31, further comprising an active agent associated with said transfersomes, said active agent being contained in the interior of said transfersome in an outer membrane of said transfersome, or both.
36. (New) Preparation as claimed in claim 31, wherein the total concentration of said lipid in said medium is between 0.1 and 15 weight-%.
37. (New) Preparation as claimed in claim 31, wherein the total concentration of said lipid in said medium is between 5 and 10 weight-%.
- 125 C2* 38. (New) Preparation as claimed in claim 31, wherein the total concentration of said lipid in said medium for application on plants is 0.000001 through 10 weight-%.
39. (New) Preparation as claimed in claim 31, wherein the total concentration of said lipid in said medium for application on plants is between 0.001 and 1 weight-%.

Alcont

500.1004CON

40. (New) Preparation as claimed in claim 31, wherein the total concentration of said lipid in said medium for application on plants is between 0.01 and 0.1 weight-%.
41. (New) Preparation as claimed in claim 34 wherein the active agent is selected from the group consisting of an adrenocorticostatic, a β -adrenolytic, an androgen, an antiandrogen, an antiparastic, an anabolic steroid, an anaesthetic, an analgesic, an analeptic, an antiallergic, an antiarrhythmic, an antiarterosclerotic, an antiasthmatic, a bronchospasmolytic, an antibiotic, an antidepressant, an antipsychotic, an antidiabetic, an antidote, an antiemetic, an antiepileptic, an antifibrinolytic, an anticonvulsive, an anticholinergic, an enzyme, a coenzyme, an enzyme inhibitor, an antihistaminic, an antihypertonic, an anticoagulant, an antimycotic, an antimyashenic, an anti-parkinson agent, an antiphlogistic, an antipyretic, an antirheumatic, an antiseptic, a respiratory analeptic, a respiratory stimulant, a broncholytic, a cardiotonic, a chemotherapeutic, a coronary dilator, a cytostatic, a diuretic, a ganglion-blocker, a glucocorticoid, an antiviral agent, a haemostatic, a hypnotic, an immunologically active substance, a carbohydrate, a contraceptive, an antimigraine agent, a morphine-antagonist, a muscle relaxant, a narcotic, a nucleotide, a neuroleptic, a neurotransmitter, a neurotransmitter antagonist, an ophthalmic agent, a sympaticomimetic, a sympathicoclytic, a parasympaticomimetic, a parasympathicolytic, a protein, a protein derivative, an anti-psoriasis agent, a neurodermitis drug, a mydriatic, a psychostimulant, a rhinologic, a sleep-inducing agent, a stimulant, a sedating agent, a spasmolytic, a tuberlostatic, a urologic, a vasoconstrictor, a vasodilator, a virustantic, a wound-healing substance, and a combination thereof.
42. (New) Preparation as claimed in claim 35 wherein said active agent is a growth modulating substance for living organisms.

Q cont.

500.1004CON

43. (New) Preparation as claimed in claim ~~35~~ wherein said active agent exerts biocidal activity as an insecticide, pesticide, herbicide or fungicide.
44. (New) Preparation as claimed in claim 35 wherein the active agent is an attractant.
45. (New) Preparation as claimed in claim ~~35~~ wherein the active agent is a pheromone.

53
1/2 C 3

46. (New) A method of manufacturing preparations for the transport of agents through permeability barriers:

(A) combining a lipid and a surface active agent that can solubilize said lipid in a suitable medium and determining the ratio of lipid to surface active agent which enables transfersomes formed by combining said lipid and said surface active agent in said medium to undergo sufficient deformation to enable said transfersomes to pass as an entity through a permeability barrier which has pores smaller than the size of said transfersomes, and

(B) preparing said transfersomes in said medium such that the total concentration of said lipid in said medium is from about 0.1% to about 30%, by weight.

47. (New) Method as claimed in claim 46 wherein said transfersomes are unilamellar .

1/2 S
1/2 B

48. (New) Method as claimed in claim 46, further comprising determining the stability and the permeation capacity of said transfersomes the droplets by means of gravity or pressure filtration, through a fine-pore filter.

49. (New) Method of claim 47 wherein the stability and the permeation capacity of said transfersomes are determined by means of mechanical fragmentation.

50. (New) Method as claimed in claim 46 wherein the content of said surface active substance is between 20 and 50 mol-% of the concentration of such substance that causes said lipid to be solubilized.
51. (New) Preparation as claimed in claim 33 wherein said preparation comprises at least one antidiabetic agent.
52. (New) Preparation as claimed in claim 46 wherein said transfersomes have a double layer structure.
53. (New) Preparation as claimed in claim 46, wherein said lipid is a synthetic lipid.
54. (New) Preparation as claimed in claim 46, wherein said lipid comprises a glyceride.
55. (New) Preparation as claimed in claim 46, wherein said lipid is selected from the group consisting of glycerophospholipid, isoprenoidlipid, sphingolipid, a sulfur-containing lipid, and a carbohydrate-containing lipid.
56. (New) Preparation as claimed in claim 46, wherein said lipid comprises a fatty acid.
57. (New) Preparation as claimed in claim 46, wherein said lipid is selected from the group consisting of phosphatidylcholine, phosphatidylethanolamine, phosphatidylglycerol, phosphatidylinositol, phosphatidic acid, phosphatidylserine, sphingomyeline, sphingophospholipid, glycosphingolipid, cerebroside, ceramidepolyhexoside, sulfatide, sphingoplasmalogene, a ganglioside, and a glycolipid.
58. (New) Preparation as claimed in claim 46, wherein said lipid is selected from the group consisting of dioleoyl lipid, dilinoleyl lipid, dilinolenyl lipid, dilinolenoyl lipid, diarachidoyl lipid, dimyristoyl lipid, dipalmitoyl lipid, distearoyl lipid, phospholipid,

~~Account~~
C 4 count.

500.1004CON

diacyl lipid and dialkyl lipid.

59. (New) Preparation as claimed in claim 31, wherein surfactant is selected from the group consisting of nonionic surfactants, zwitterionic surfactants, anionic surfactants and cationic surfactants.
60. (New) Preparation as claimed in claim 31, wherein said surfactant is selected from the group consisting of a long-chain fatty acid, a long-chain fatty alcohol, an alkyl-trimethyl-ammonium-salt, an alkylsulfate salt, a cholate-, a deoxycholate-, a glycodeoxycholate-, taurodeoxycholate, dodecyl-dimethyl-aminoxide, decanoyl-N-methylglucamide, dodecanoyl-N-methylglucamide, N-dodecyl-N, N-dimethylglycine, 3-(hexadecyldimethylammonio)-propane-sulfonate, N-hexadecyl-sulfobetaine, nonaethylene-glycol-octylphenylether, nonaethylene-dodecylether, octaethyleneglycol-isotridecylether, octaethylenedodecylether, polyethylene glycol-20-sorbitanemonolaurate, polyhydroxyethylene-cetylstearyl ether polyhydroxyethylene-4-laurylether, polyhydroxyethylene-23-laurylether, polyhydroxyethylene-8-stearate, polyhydroxyethylene-40-stearate, polyhydroxyethylene-100-stearate, polyethoxylated castor oil 40, polyethoxylated hydrated castor oil, sorbitanemonolaurate, lauryl-salts, oleoylsulfate-salts, sodium deoxycholate, sodium glycodeoxycholate, sodium oleate, sodium elaidate, sodium linoleate, sodium laurage, nonaethylene-dodecylether, polyethylene glycol-20-sorbitane-monooleate, polyhydroxyethylene-23-laurylether, polyhydroxyethylene-40-stearate, a sorbitane phospholipid, a monolaurate phospholipid, and a lysophospholipid.
61. (New) Preparation as claimed in claim 35, wherein said agent comprises 1 through 500 I.U. insulin/ml.

At cont
C4

500.1004CON

62. (New) Preparation as claimed in claim 35, wherein said agent comprises between 20 and 100 I.U. insulin/ml.
63. (New) Preparation as claimed in claim 31, wherein the total concentration of said lipid in the preparation is between 0.1 through 20 weight-%.
64. (New) Preparation as claimed in claim 31, wherein the total concentration of said lipid in the preparation is between 0.5 and 15 weight-%.
65. (New) Preparation as claimed in claim 31, wherein the concentration of said lipid in the preparation is between 2.5 and 10 weight-%.
66. (New) Preparation as claimed in claim 31, wherein said lipid is selected from the group consisting of phosphatidylcholine and phosphatidylglycol.
67. (New) Preparation as claimed in claim 31, wherein said surfactant is selected from the group consisting of lysophosphatidic acid, lysophosphoglycerol, deoxycholate, glycodeoxycholate, laurate, myristate, oleate, palmitoleate, phosphate salts thereof, sulfate salts thereof, a Tween-surfactant and a Myrj-surfactant.
68. (New) Preparation as claimed in claim 31, wherein the radius of said transfersomes in the preparation is between approximately 50 and approximately 200 nm.
69. (New) Preparation as claimed in claim 31 wherein the radius of said transfersomes in the preparation is between approximately 100 and approximately 180 nm.